**Division / Team / Role: Core Engineering Products / Data Engineering and Data Infrastructure Program (DEDIP) / Tech - Software Engineer : Cloud File Transfer (CFT)**

**Requirements:**

Task: Implement a simple web application that can perform simple calculations.

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1. **Frontend:**

* Create a single page web application that displays 2 number input fields, an "Add" button and a "Subtract" button.
* When you fill up the 2 input fields and click the "Add" button, your application will send a POST request to your server, which will reply with the addition of the 2 numbers. You will display the result in your webpage.
* When you fill up the 2 input fields and click the "Subtract" button, your application will send a POST request to your server, which will reply with the subtraction of the 2 numbers. You will display the result in your webpage.
* If any of the 2 input fields are blank, just treat the input value as 0 and still trigger the request to the server, displaying the result in your webpage.

Notes:

- You do not need to style your application with any CSS.

- You may use any framework/language you like.

1. **Backend:**

* Create a simple REST API server that will accept requests from your frontend application.
* API 1 - POST request using (application/x-www-form-urlencoded) accepting 2 numbers, add the 2 numbers in the server, and return the result as a response (application/json)
* API 2 - POST request using (application/x-www-form-urlencoded) accepting 2 numbers, subtract the 2 numbers in the server, and return the result as a response (application/json)

Notes:

- You do not need to do any authentication for your requests

- You may use any framework/language you like

**Bonus**

- Write 1 or 2 unit testing (automated testing) to determine whether they are fit for use.

**What’s Next**

- Upload your code to cloud or a git repository.

- You will be asked to demonstrate the application(s) you have built during the panel discussion with the team.